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With the Medical Officer of Health's Compliments.

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**Newport Port Sanitary Authority.**

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# **Annual Report**

**For the Year 1928.**

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BY

**THE MEDICAL OFFICER OF HEALTH,  
J. HOWARD JONES, M.D., D.Sc. C.M.**



NEWPORT :  
LLOYD-WILLIAMS & SAFFIN, Printers, 12, Blewitt Street.

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# County Borough of Newport.

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## Health and Port Sanitary Committee, 1928.

### Chairman—

ALDERMAN COL. W. CLIFFORD PHILLIPS.

### Deputy Chairman—

COUNCILLOR I. C. VINCENT.

HIS WORSHIP THE MAYOR (Councillor F. Quick).	COUNCILLOR W. J. WALL
ALDERMAN J. MCGINN	„ F. J. HUMPHRIES
„ J. LLOYD DAVIES	„ R. W. GWATKIN
„ T. G. LEWIS	„ W. CASEY
COUNCILLOR W. A. LINTON	„ MRS. M. A. HART
„ FRED JONES	„ MRS. C. M. LEWCOCK
„ J. S. JOHNSON	„ J. K. PRICE
(Died 26/6/28)	„ F. SWEENEY
„ J. G. BOOTS	„ A. LEVESON
(Died 30/12/28)	

### Clerk to Port Sanitary Authority—

O. TREHARNE MORGAN.

### Medical Officer of Health—

J. HOWARD JONES, M.D., D.Sc., C.M.

### Port Sanitary Inspector—

W. JENKINS, Cert. Royal Sanitary Institute.

### Assistant Inspector—

J. H. GLASS.

### Rat Catcher—

C. POWELL.

### Caretaker of Port Sanitary Hospital at Cefn—

A. E. WALKER.

# Newport Port Sanitary Authority.

HEALTH DEPARTMENT,

TOWN HALL, NEWPORT,

*May, 1929.*

TO THE CHAIRMAN AND MEMBERS OF THE NEWPORT PORT SANITARY  
COMMITTEE.

GENTLEMEN,

I beg to submit my Report for the year 1928. It is made in accordance with the Regulations of the Ministry of Health which are prescribed within the duties of the Medical Officer of Health.

The Port was permanently constituted a Port Sanitary District by the Local Government Board, May 9th, 1883.

## I.—Constitution of Port Sanitary Authority:—

“The Port Sanitary Authority is the Mayor, Aldermen, and Burgesses of the Borough of Newport, acting by the Council. It discharges Port functions in waters abutting upon the Magor and St. Mellons Rural Sanitary Districts in addition to the Newport Urban Sanitary District.”

## II.—Limits of Jurisdiction:—

“The whole of the Port of Newport (Order May 9th, 1883). By the Treasury Warrant, dated December 20th, 1847, the limits of the Port of Newport are defined as commencing at Redwick Pill, in the County of Monmouth, being the Western extremity of the Port of Chepstow, and continues along the coast of the said County to the River Rumney, and seaward to the middle of the Severn.”

III.—Riparian Districts included (wholly or in part) in the Port Sanitary District :—

County Borough of Newport.

Magor Council District. Parishes—Nash, Goldcliff and Redwick.

St. Mellons Council District. Parishes—St. Brides, Peterstone and Rumney.

IV.—Apportionment of Expenses :—

The Urban Sanitary Authority contributes according to the rateable value of its district, and the Rural Sanitary Authorities contribute according to the rateable value of their riparian parishes.

The proportions contributed by the various Riparian Authorities towards expenses incurred by the Port Sanitary Authority are as follows :—

	1928.	1927.	1926.
County Borough of Newport	92·88	92·51	92·68 per cent.
Magor Rural District Council	2·01	2·01	2·06 per cent.
St. Mellons District Council	5·09	5·43	5·26 per cent.

#### PORT OF NEWPORT.

The Newport Development Association have kindly supplied me with the following particulars with reference to the special facilities provided at the port for trading purposes :—

NEWPORT Alexandra Dock has the largest single sheet of deep dock water in the world, which is 125 acres

NEWPORT has the largest Dock Entrance in the world, which is 1,000ft. long by 100ft. wide.

NEWPORT has coal hoists which can lift large capacity wagons—20 tons—70 feet from quay level, which are the highest hoist lifts in the United Kingdom.

NEWPORT is noted for low f.o.b. and c.i.f. charges.

NEWPORT has regular lines of steamers to and from practically all parts of the world.

NEWPORT gives the most rapid despatch of loading and unloading of steamers of any port in the United Kingdom.

NEWPORT is the best distributing port for Monmouthshire, East Glamorgan-shire, Herefordshire, Gloucestershire, Worcestershire, Birmingham and South Midlands.

NEWPORT is the nearest South Wales Port to the Midlands.

NEWPORT gives direct transit to and from alongside steamers, as the steamship berths are rail connected. This not only reduces handling to a minimum, but also keeps down the charges.

NEWPORT has eight modern dry docks.

NEWPORT is one of the largest coal exporting ports in the United Kingdom.

NEWPORT Docks are well equipped with modern up-to-date machinery and deal with all classes of exports and imports.

NEWPORT has excellent Cold Storage accommodation, privately owned.

NEWPORT is the Ocean Gateway of the most important coal field in the world.

NEWPORT'S River Usk is a broad, deep and easily navigable river. The tidal rise is one of the highest in the world, being on an average 38 feet. The uniform breadth of the River, to the centre of the Town (4 miles from the mouth) is about 1,000 feet. There are miles of Riverside Wharves.

### CHARACTER OF THE TRADE OF THE PORT.

The Trade is chiefly Cargo, although there are excellent facilities for passenger traffic. The only passengers during the year were 205 "inwards" and 46 "outwards," all carried in cargo vessels.

**Exports.**—Coal, Coke and Patent Fuel, Iron and Steel Rails, Sleepers, "Chairs" and Tie-rods, Locomotives and Railway Carriages, Corrugated and Blank Sheets, Tin and Blockplates, Machinery and Structural Ironwork, Copper Bars, Cement and General Merchandise.

**Foreign Imports.**—Machinery, Steel and Iron Bars and Billets, Pig-Iron, Pitwood and Mining Timber, Timber and Deals, Glass and China Ware, Toys and Matches, Iron Ore, Manganese Ore, Phosphate and Cement, Wool, Wine and Spirits, Potatoes and Onions, Grain, and General Merchandise.

The Countries principally traded with are:—Irish Free State, France, Spain, Italy, Belgium, Africa, South America, Japan and India.

Most of the ports which trade with Newport will be found in Tables II. to IV.



TABLE I.

Showing trade of Port for decennial periods extending over 57 years. Figures kindly supplied to me by the Secretary of the Newport Chamber of Commerce and H.M. Customs.

FOREIGN.				COASTWISE.			
Year.	Tons Entered.	Tons Cleared.		Year.	Tons Entered.	Tons Cleared.	
1871	... 156,441	... 412,043		1876	... 287,816	... 483,476	
1881	... 635,777	... 892,169		1886	... 258,285	... 742,818	
1891	... 736,145	... 1,101,318		1896	... 1,384,049	... 797,223	
1901	... 971,953	... 1,517,118		1901	... 1,195,797	... 660,380	
1911	... 1,739,898	... 2,349,408		1911	... 1,363,600	... 822,315	
1912	... 1,942,748	... 2,385,688		1912	... 1,280,220	... 853,611	
1913	... 2,137,420	... 2,672,080		1913	... 1,491,674	... 998,963	
1914	... 1,900,005	... 2,370,599		1914	... 1,353,130	... 887,931	
1915	... 1,795,095	... 2,144,557		1915	... 1,300,092	... 694,759	
1916	... 2,095,388	... 1,886,417		1916	... 929,383	... 601,248	
1917	... 1,070,530	... 1,082,234		1917	... 883,927	... 442,009	
1918	... 1,413,647	... 1,019,189		1918	... 1,017,797	... 398,713	
1919	... 1,536,007	... 2,257,557		1919	... 1,219,299	... 587,003	
1920	... 1,404,984	... 2,195,001		1920	... 1,549,863	... 967,098	
1921	... 1,126,194	... 1,506,358		1921	... 862,467	... 521,086	
1922	... 2,130,653	... 2,736,713		1922	... 1,363,933	... 840,306	
1923	... 2,735,205	... 3,562,570		1923	... 1,152,277	... 735,948	
1924	... 2,193,808	... 2,956,939		1924	... 1,297,608	... 770,929	
1925	... 2,009,939	... 2,678,554		1925	... 1,496,453	... 794,973	
1926	... 1,336,075	... 1,571,311		1726	... 583,278	... 1,547,511	
1927	... 2,071,514	... 2,791,228		1927	... 1,368,018	... 711,085	
1928	... 1,901,656	... 2,663,432		1928	... 1,306,878	... 693,931	

The total number of vessels that entered the Port during the year was 6,190. The tonnage of these vessels amounted to 3,208,534. The corresponding figures for 1927 were 5,924 and 3,439,532.



The following Table shows the numbers of the various type of vessels and gives comparative figures for last year and the average for the previous five years:—

COASTWISE—		1937	Average previous 5 Years		1928	
Steam	....	3218	...	2812*	...	3620
Sail	....	396	...	343	...	437
Fishing	....	—	...	9	...	—
Motor	....	171	...	—	...	223
Total	....	3785	...	3164	...	4280
FOREIGN—						
Steam	....	2042	...	2259*	...	1859
Sail	....	40	...	43	...	16
Fishing	....	—	...	—	...	—
Motor	....	57	...	—	...	35
Total	....	2139	..	2302	...	1910
Total Coastwise & Foreign		<b>5924</b>	...	<b>5466</b>	...	<b>6190</b>

\* Steam includes Motor.

The following figures shew the total volume of the trade of Newport from 1898 to 1916 inclusive. From 1922 they refer to the trade of the G.W.R. Docks and Jetties only. The latter figures were kindly supplied by the Superintendent of the Docks.

Year.	Imports in Tons. (Coastwise and Foreign.)	Exports in Tons. (Including Bunkers.)	Total.
†1898	... 723,878	... 2,681,125	... 3,585,003
1899	... 1,211,864	... 4,663,953	... 5,875,817
1900	... 1,020,942	... 4,273,656	... 5,294,598
1901	... 870,868	... 4,124,585	... 4,995,453
1902	... 998,221	... 4,361,206	... 5,359,427
1903	... 1,165,169	... 4,756,844	... 5,922,013
1904	... 1,263,243	... 5,067,384	... 6,330,627
1905	... 1,361,621	... 4,865,484	... 6,227,105
1906	... 1,425,220	... 5,452,648	... 6,877,868
1907	... 1,396,191	... 5,620,756	... 7,016,947
1908	... 1,527,940	... 5,834,878	... 7,362,818
1909	... 1,290,878	... 5,740,878	... 7,031,756
1910	... 1,372,580	... 5,725,612	... 7,098,192
1911	... 1,326,429	... 6,105,869	... 7,432,298
†1912	... 1,526,198	... 5,248,219	... 6,774,417
1913	... 1,867,752	... 5,862,140	... 7,729,892
1914	... 1,210,985	... 5,180,128	... 6,391,113
1915	... 1,049,764	... 4,877,390	... 5,927,154
1916	... 917,746	... 4,810,743	... 5,728,489
1922	... 467,962	... 6,426,371	... 6,894,333
1923	... 874,417	... 7,083,719	... 7,958,136
1924	... 1,025,099	... 5,932,602	... 6,957,701
1925	... 907,236	... 5,173,197	... 6,080,433
†1926	... 1,197,092	... 2,426,679	... 3,623,771
1927	... 1,082,839	... 5,417,254	... 6,500,093
1928	... 823,011	... 5,203,720	... 6,026,731

(† Years of strikes in coal trade).

In the absence of figures showing the total volume of trade for the whole of the Port the following "value" figures relating to Foreign Trade only—kindly supplied by H.M. Customs—are of interest:—

	Imports.	General Exports Excluding Coal.	Coal Exports in Tons.	Coal Bunkers in Tons.
	£	£		
1917 ...	2,568,162	3,353,520	3,346,211	544,755
1918 ...	6,080,010	2,343,916	3,124,257	432,583
1919 ...	2,444,331	3,214,480	3,654,802	609,726
1920 ...	4,348,041	5,269,457	2,678,650	560,834
1921 ...	2,889,297	3,155,229	1,981,487	437,145
1922 ...	2,027,030	4,564,483	4,777,057	812,034
1923 ...	3,613,471	5,634,546	5,603,885*	721,338
1924 ...	5,488,317	5,123,221	4,448,989*	716,011
1925 ...	5,394,287	5,155,928	3,871,077*	602,768
1926 ...	6,365,779	3,596,205	1,724,047*	263,518
1927 ...	6,470,626	6,056,696	3,806,445*	595,265
1928 ...	4,038,635	4,935,613	4,308,046*	628,237

*Value of Coal Exported—1923 ..	£7,262,627	1926 ..	£1,649,032
1924 ..	£5,526,080	1927 ..	£3,717,827
1925 ..	£4,274,692	1928 ..	£3,163,395

#### GENERAL INSPECTION OF VESSELS.

21·9 per cent. of the 1796 vessels inspected during the year had sanitary defects according to the present standard laid down by the Board of Trade. 29·9 per cent. of the vessels from foreign ports were insanitary, compared with 13·3 per cent. of the coastwise vessels.

Nationality.	Percentage with Sanitary Defects.				
	1928.	1927.	1926.	1925.	1924.
Belgian ...	7·0	3·9	12·0	4·0	11·11
<b>British ...</b>	<b>23·9</b>	<b>22·0</b>	<b>17·6</b>	<b>15·0</b>	<b>12·7</b>
Danish ...	2·6	7·7	—	2·2	10·5
Dutch ...	—	5·9	11·0	4·0	15·0
French ...	10·1	15·5	14·0	6·7	17·6
German ...	3·7	3·45	—	8·0	13·0
Greek ...	50·0	20·0	37·5	25·0	50·0
Italian ...	31·4	23·1	30·0	28·0	33·3
Japanese ...	14·3	—	—	—	—
Norwegian ...	10·1	11·81	10·6	5·4	20·4
Spanish ...	37·0	41·1	35·3	31·7	42·25
Swedish ...	—	3·3	2·6	5·0	8·3

Also 4 American ships were inspected, 1 Finnish, 2 Jugo Slavian, 6 Portuguese and 2 Russian without any defects being discovered. The number of Esthonian and Latavian ships inspected was too small to be included in this table.

In previous Reports attention has repeatedly been drawn to the fact that the cleanest quarters are to be found on Swedish, Norwegian, Danish Dutch and Belgian vessels. German vessels are also generally cleaner than British vessels, whilst those owned by the Latin races are the worst.

The superior condition of the former group is largely due to better supervision. It is very desirable that the subject of the supervision of crew's quarters should be seriously considered by representatives from the Board of Trade, Ministry of Health, Shipowners and the Mens' Unions, in the interest of health, and that definite rules should be formulated, which should be strictly enforced by the officers. The subject has been seriously neglected; the principals laid down and practiced by Captain James Cook on his voyages round the World in the 17th Century should be studied carefully. By force of example and precept, he revolutionised the practices then in vogue and made the men realize that the practice of Domestic Hygiene on board his ships was essential for the maintenance of life and good health. He succeeded in maintaining obedience to the rules he laid down without recourse to severe disciplinary measures even in the 17th Century, and kept his men free from the diseases which crippled most of the efforts of the Explorers of the middle ages.

#### HYGIENE OF CREWS' QUARTERS.

A thorough revision of our standards of hygiene of crews' quarters on board merchant ships is long overdue. My Annual Report for 1927 contained a summary of the measures taken by various Societies and bodies interested in Public Health—including the Newport Port Sanitary Authority—to induce the Governments to take action in the matter.

As Marine Hygiene requires discussion from all points of view, I beg to supplement my previous comments on the subject by the following general observations:—

It is quite evident that many owners are willing and even anxious to provide bright and healthy quarters for their employees, but unless the shipbuilders or superintendents are given definite instructions on the matter, the old type of quarters are provided with little improvement. I have come across instances where the owners have given instructions to provide good quarters, and the quarters provided have been badly designed and cramped, even in the poop, whereas far better accommodation could have been provided at the same cost.

The standard and type of living quarters provided by most shipbuilders and their naval architects depends upon the standard insisted upon by the Government concerned. The Board of Trade is the responsible Department in this country. Unfortunately, the quarters are built before the Board of Trade Surveyors inspect the vessels, and it frequently happens that much better accommodation could be provided without extra expenditure, if the designers possessed greater knowledge of hygiene.

It is essential therefore that plans and specifications of crews' spaces—both for officers and men—should be submitted to, and passed by, competent sanitarians, and that such plans should not be altered without official permission. Unfortunately, the Board of Trade have no medical staff to assist in this work.

In Australia, plans have to be submitted to, and passed by, a Medical Department before the work is carried out and the result is that far better quarters are generally provided on Commonwealth vessels.

In France, the plans of vessels have to be submitted to a Board of Construction, consisting of experts and representatives of all interested parties, including the Director of Public Health.

In the Navy, all plans of new ships are submitted to, and criticised by, an officer on the staff of the Naval Medical Director-General, and the ventilation of any ship under construction is inspected by such representatives.

**FORECASTLE.**—I have previously drawn attention to the disadvantages of the forecastles as living spaces for the crew. This view is now generally accepted and in some countries their use for this purpose, except on small vessels, is prohibited: and when British vessels with such living quarters are taken over by shipowners, new quarters in the poop or midships have to be provided. A large proportion of British tramp steamers have been, and they still are being, constructed with the crew in the forecastle. It is difficult to understand the mentality of naval architects and others, who will persist in providing living quarters for crews in the forecastle, in view of the fact that it is the worst place in the ship for such purposes. It has been suggested to me that it is due to the survival of the traditions when mutinies frequently occurred. The Master and his officers who occupied the bridge and controlled the steering had far better chances of quelling disturbances with all the men in the fore part of the ship.

Attention has already been drawn to the advantages of the poop or deck houses for the crew's living quarters.

**STORAGE OF FOOD**—The arrangements for the storage of foods issued weekly to the crews of "monthly" boats are often very unsatisfactory. They consist of a food locker in the sleeping quarters where no mess-room is provided. The stores usually issued are condensed milk, butter, jam, pickles and bread; and in "weekly" boats, potatoes and other vegetables, onions, fresh meat, bacon, and fish are also stored in these heated and badly ventilated quarters.

Mess-room accommodation should be provided apart from the sleeping quarters. Any exception to this rule in the case of vessels of small tonnage must receive special sanction.

This is an elementary principal in domestic hygiene, but unfortunately it is still ignored by some shipbuilders and shipowners, or their superintendents, or so called naval architects.

Where these are provided, the British Regulations allow the owners to reduce the allowance of 120 cubic feet per head by the space allowed for messrooms, etc., provided the space is not reduced below 72 cubic feet. No such reduction should be allowed. These mess-rooms should be fitted with the necessary appointments, which are provided in the humblest of cottages.

This might be regarded as a drastic demand when we consider that 120 cubic feet and 15 square feet of floor space were the minimum requirements in the 1906 Merchant Shipping Act, and that this did not apply to vessels completed before on under construction on January 1st, 1907, to vessels not exceeding 300 tons register (net), or fishing boats, or to La-car's living spaces; and, as previously stated, mess-room space, wash-houses and bathrooms, etc., could be deducted from the spaces allowed for sleeping quarters, provided there was a minimum of 72 cubic feet and 12 square feet of floor space.

The *cubic space* required for the maintenance of health and efficiency of service depends upon the adequacy of the ventilation. When the admitted air is warmed to the proper temperature, and distributed as much as possible to avoid the production of draughts, the amount of cubic space required per person can be reduced to a smaller amount than in quarters where the ventilation is primitive



in character, as it is in crews' quarters on the average steamship. Owing to the crudeness of the system of ventilation generally provided in the Chinese and Lascar or native quarters on vessels, the occupiers frequently close up the inlet pipe to avoid draughts. Consequently we have there very defective ventilation in addition to deficient cubic space. The smaller the cubic space, the greater the need for a thoroughly efficient and automatic system of ventilation; which includes control over the temperature and the moisture of the air supply. The Commonwealth of Australia require a cubic space of 140 cubic feet, and floor space of 18 square feet for men, and 180 cubic feet for Officers, with a very slight reduction in the case of vessels under 300 tons register.

The Norwegians require 140 cubic feet, and 14 square feet per man on all vessels of 200 tons and over in every sleeping room, exclusive of bunks, cupboards and other enclosed spaces, and a height of 6 ft 1 in. In vessels of 1,000 tons and over, a height of 6 ft. 7 ins. is required

We must bear in mind that on British vessels with a minimum floor space of 12 square feet, most of the space is often taken up by seats, lockers, tables, ventilating pipes passing through the mens' quarters, in addition to bunks and the personal belongings of the crew. These cramped spaces are very difficult to keep clean.

The cubic space required by the War Office for hospital berths on transports, etc., is 300 cubic feet per berth, with a floor space of 35 square feet.

The Board of Trade requirements for 2nd Class passengers is 30 square feet in single cabins, and 15-25 square feet per head in 4 berth cabins. These are generally provided with mechanical ventilation

The Board of Trade requirements for emigrants and Immigrants on passenger boats are as follows with respect to floor space :—

**'Tween Decks.**—15 square feet if lofty.

18 square feet if less than 7 feet high.

**Below Water Line.**—18 square feet if lofty.

25 square feet if less than 7 feet high.

Separate mess-rooms, bathrooms and recreation rooms are provided in addition. In the case of crews, the same standard of requirements obtain whether the men are housed on deck, in lower forecastles, or elsewhere above or below the water line. The principle is thus laid down that a more liberal cubic space and floor space is required for Emigrants and Immigrants housed on lower decks. Yet no provision has been made for any extra floor space or cubic space for crews housed in lower forecastles.

Some recently built ships designed for trading in the Tropics are provided with extra doors and screens made of wire netting on light frames to prevent the entrance of mosquitoes into living quarters through doors, skylights, portholes and other ventilators; but a large number of vessels which visit malarial or infected ports do not provide any protection for the crew against infection by means of mosquitoes.

When people get accustomed to degrading conditions of living they become obstacles in the path of reform for a time. This has been a serious obstacle in the reforming of slums; but it is only temporary in character, and slum dwellers can be educated to appreciate better living conditions.

For many years attention has been drawn to the want of regulations for ensuring better supervision of crews' quarters. Masters and officers have frequently complained of the difficulties of enforcing cleanliness among their crews,

It is very disappointing to find from the Annual Reports of Port Medical Officers of Health that a considerable percentage of tramp steamers arrive at home ports in a dirty condition. For years, the practice of leaving the cleaning of quarters to be done in port has been prevalent. This is partly the result of the short engagement system—for the trip only—which is often of short duration. When men are engaged for longer voyages, the conditions are generally much better. Crews are liable to a penalty of 5/- each if they leave their quarters dirty at the end of the voyage, but masters have frequently complained to me that they do not obtain the support of the higher authorities when they endeavour to enforce the matter. The owners have to employ women as a rule to clean the men's quarters in Port. The Unions which look after the interests of the men can assist in this matter, not only by educating their members to a higher standard of cleanliness, but also by promoting any reforms which will give masters the power to enforce any rules for the better hygiene of the forecables.

To enforce satisfactory cleanliness in the crews' quarters, it is necessary that some general understanding should be arrived at between masters and men as to the duties of both parties in this matter. The men are expected to clean their quarters during their off duty period. This has not proved satisfactory. On Dutch and American vessels, the owners are required to provide separate mess boys to attend to the cleansing of sailors' and fireman's sleeping quarters, mess-rooms and utensils. The whole question requires consideration in order to ensure a higher standard of domestic hygiene in the Merchant Service. This has been referred to elsewhere.

Metal frames for bunks are being used very extensively on new vessels, but a large number of vessels still contain wood-framed bunks, with many crevices in the joints, where vermin breed and which are difficult to keep clean. When the bottoms of the bunks are made of wood, strips with good spaces between them should be substituted for tongued and grooved frames. Even when metal frames are used the ends of the tubular frames should be blocked up, otherwise they will harbour vermin and their eggs.

To comply with the Board of Trade, 1913, standard, it is laid down that when the ship is new and paint clean a newspaper (*The Times*) should be readable when one third of the lighting space is cut off. The 1923 standard is less exacting, as the cutting off of one third of the lighting space is not required when applying the test.

The lighting of crews' spaces is generally below the standard laid down by the Board of Trade. Few vessels will pass this standard under ordinary working conditions, especially in quarters situated in the forecables, as, on most English vessels, bunks are placed against the ship's sides, the upper rows being placed 6 to 12 inches below the port-holes; consequently the lighting of the lower part of the forecable is obstructed by these fittings, and articles suspended near the port-holes, and in some parts the light is hardly sufficient to "make darkness visible." A great part of the floor space in particular is very dark. This, naturally, leads to neglect in respect to the cleansing of the floors and quarters.

This interference with the efficient lighting of the living spaces is not the only objection to the British practice of placing bunks against the ship's sides; it also interferes with the use of the port-holes as ventilators, as the occupiers of the upper bunks just under the port-holes object to the wind and rain beating upon them when the port-holes are open.

The practice of using dark colour paint in living quarters is, fortunately rapidly being given up; but some new vessels are still being painted in dark colours. The white painted walls, etc., very materially improve the lighting of living spaces. It also renders dirt visible, and draws attention to the necessity for more frequent washing of the woodwork and bulkheads.

The Board of Trade Regulations as to ventilation of crews' quarters should be strictly adhered to, irrespective of doors and other accessory sources.

Improved circulation of air in stoke-holds is recommended.

QUARTERS.--Although no hard and fast rules are laid down in reference to ventilation, the regulations state that whether the accommodation consists of a fore-castle, poop, houses or cabins, there should be not less than two ventilators, one serving as an inlet for the admission of fresh air, and the other as an outlet for the escape of air. The regulations imply that there should be ventilators independent of doors, scuttles, companions, and other apertures not built solely for ventilation, which are not considered as efficient means of ventilating crews' spaces.

The tendency at present is for ship-builders to provide one ventilator in the ceiling and to depend upon openings in or over doors leading into alleyways, etc., as a second ventilator. In fore-castles in particular, this arrangement is inadequate, especially during stormy weather.

The prevention of excessive humidity is very important. The sources of moisture are oil lamps, human perspiration, dampness of quarters, etc., whilst condensation takes place owing to the high conductivity of metal surfaces on ship's sides, etc. The bad effects of excessive humidity are well-known to all students of medicine.

VENTILATION.—Trimming of the cowls according to the direction of the wind currents, if attended to intelligently and systematically, is a great help towards better ventilation, but mechanical ventilation by means of a thermo-regulating apparatus should be provided wherever possible, especially on vessels with large crews, as the mere provision of inlets and outlets does not ensure effective ventilation at all times.

The recommendations with regard to the placing of the ventilators in opposite ends of the living spaces, and the provision of air-coops for port-holes, are frequently ignored.

The whole question of the ventilation of merchant vessels, more particularly of the tramp steamers, requires the close attention of experts.

A small committee, composed of representatives from the Navy and Army Medical Service, and Naval Architects, would soon devise very valuable and practical means of improving the present standards.

STOKE-HOLDS, etc.—The thermal conditions under which firemen often work, especially in hot climates, are neither conducive to efficiency nor to health. Greater attention to the ventilation of stoke-holds is necessary.

Firemen often fall victims to heat apoplexy, as a result of the conditions under which they work. The temperature in stoke-holds sometimes reaches 115 to 140 degrees F.

Dr. Hanna, Senior Assistant Port Medical Officer of Health of Liverpool, in his Royal Sanitary Institute Prize Essay, gave detailed attention to this subject, and he rightly maintained that the usual method of ventilation is unsatisfactory, and drew attention to the fact that no provision usually exists for the ventilation of the wings or sides of the engine room, and that the stokers are not provided for, the air being simply driven down, and on being heated, ascends from the bottom opening of the ventilator, without reaching the wings of the engine-room or stoke-hold. Dr. Hanna points out that the air in the wings of the engine-room and also the stoke-hold rises to a much higher temperature than that in the centre of the engine-room; and that the temperature of the air in the engine-



rooms of turbine-driven vessels is also much higher than that of engine-rooms where reciprocating engines are used, because the trunk-heads are small, the deck-heads of the engine-room are lower, and the heated air cannot get away.

He suggests the use of two large cowl ventilators fitted with electric fans for the conveyance of air into the engine-room. One to supply air at a suitable distance from the bottom platform, the other to be divided at its lower end into two branches, with numerous perforations, which are carried to the farthest corners of the wings in a V-shaped manner. A third shaft would be used as an outlet.

The ventilation of stoke-holds can also be greatly improved by the more liberal use of electric fans.

Much greater attention has been paid to this subject in the navy, and the experience of the Navy should be made use of by those responsible for the architecture of our tramp steamers.

This matter has been very much neglected in this country, although the principal of keeping crews' living quarters dry was laid down and rigidly practiced by Captain Cook, 150 years ago. These places *should be provided* with steam heaters.

American vessels, which in the ordinary course of their trade make voyages of more than 3 days duration between ports, with crew of 12 or more seamen, are required to have a compartment for use as a hospital. One berth for every 12 seamen up to a maximum of 6 berths.

Norwegian vessels have to make somewhat similar provision for hospital beds.

The Admiralty Regulations, with reference to hospitals, are far more complete and detailed than the Board of Trade instructions.

Swedish Regulations require that sailing vessels of a gross tonnage of 1,000 tons or more and engine-propelled ships of 3,000 tons or more, used in the ocean trade, must be provided with special Lazaret (or hospitals).

The majority of the vessels in the British Mercantile Marine were built previous to 1923-4, and on a large number of the latter trough closets still exist, owing to the fact that they were not definitely prohibited. When vessels are re-surveyed, the owners should be required to fit them with pedestal w.c.'s. in separate compartments, with satisfactory flushing arrangements. Some builders interpret the term "separate compartments" in the new regulations as a narrow dwarf partition between the seats in a common compartment—this is not satisfactory. The system adopted by some French and Spanish, and by English firms for Asiatic crews, has many advantages. This system consists of stoneware half channels laid in a cement floor with proper gradients, and facets for the feet of the users. There are no seats to keep clean, and there is no danger of infection or contamination of the users from infected or soiled seats, and the complete flexion of the thighs on the abdomen supports the abdominal rings and thus reduces the chances of the users developing hernia. It is, however, not popular among British crews; yet, judging by the condition of the seats of many latrines, it is quite evident that many men squat on the seats instead of sitting upon them, for obvious reasons.

W.C. doors should be louvered, and should not open into alleyways.

For flushing purposes, a large elevated tank, with subsidiary automatic flush tanks to each w.c. is far preferable to small supply tanks, which are often empty when water is required.

On most cargo vessels, the outlets of the drains from lavatories terminate at a considerable height above the water level, and they are usually valved only, and not lipped. The sewage is thus discharged outward, and, when vessels are alongside a wharf, fouling of the latter takes place, and gangways and ships ladders and those using them sometimes receive the contents of w.c.'s, in spite of the Byelaws of Dock Companies, etc., prohibiting the use of lavatories on the side of the ship adjoining the dock side.

Cold shower baths are useless for firemen, and they are seldom used by anyone at sea in very cold climates.

Baths, whether of the slipper or shower type, should be provided with arrangements for heating the water.

I inspected a new vessel recently, and the men's showers, lavatory basins, officers' and engineers' shower baths and wash-hands basins, and even the captain's, were all supplied with cold salt water only for abtution purposes. There were no steam jets anywhere for heating the baths. The whole system was useless, and a pure waste of mouey. Firemen should be encouraged to make a practice of a thorough cleansing when leaving duty, by the provision of facilities such as those which are provided in the Navy down below in the engine-room

The Board of Trade do not issue any instructions for the safeguarding of ship's water supplies or the prevention of pollution.

Filtration is unreliable as a means of purifying water on ship-board, and as a safeguard against water-borne diseases. Wooden tanks or barrels are insanitary.

Water obtained from lighters and rivers, often of doubtful quality, can be chemically sterilised by means of chlorine and ammonia, and efficient preparations are available for sterilisation.

Rough-and-ready, but reliable, means of testing the organic impurity of water, as used in the Army are available at a small cost, and require practically little technical training by the user.

Vessels unprovided with evaporators, and trading in parts where good public supplies are not available could, with advantage both from a hygienic and financial point of view, utilise such a test, and sterilise their water supplies by chemical means.

Many deaths could have been avoided in the past if some such system had been adopted on vessels which obtained drinking water from lighters and other doubtful sources.

In the Navy, very definite instructions are issued with respect to the prevention of contamination when filling ships' water tanks from lighters and hose pipes.

Surgeon-Captain Shaw's little book on the water supply of H.M. Ships during the war is of interest in this connection.

In the Merchant Service, the suction pipe, or outlet pipe, of the water tank terminates usually about 2 in. from the bottom, and the tanks are therefore not completely emptied when they are re-filled. They are cleaned out and cement-washed periodically. In the Navy they use "Rosboirete" or "Bituros" in preference to cement; it is much more durable.

## NON-NOTIFIABLE DISEASES.

Table IV. gives a list of the vessels on which cases of non-notifiable illness occurred after their arrival in Newport and which were visited during their stay in port. The following is a summary of the illnesses recorded:—Accidents, 28; Cancer, 1; Colds, 18; Enlarged Glands, 1; Gastritis and Gastric Ulcer, 5; Haemorrhoids, 5; Heart Disease, 1; Intestinal Complaint, including Appendicitis, 10; Laryngitis and Tonsillitis, 1; Mental, 1; Nervous Debility, 1; Respiratory Diseases, 7; Rheumatism, 4; Septic Diseases, 2; Skin Diseases, 2.—Total 87 cases.

Table IVA. shews a list of vessels which had cases of non-notifiable illness on board during the voyage and which were reported on arrival. The illnesses are summarised as follows:—Accidents, 30; Bright's Disease, 1; Cancer, 1; Cerebral and Mental Diseases, 2; Colds, 4; Eye Trouble, 1; Gastritis, Gastric Ulcer, etc., 3; Haemorrhoids and Varicose Veins, 2; Heart Disease, 2; Hernia, 1; Homicide, 1; Intestinal Complaint, including Appendicitis, 5; Nervous Debility, 2; Quinsey, 1; Respiratory Diseases, 1; Rheumatism, 7; Septic Diseases, 1; Skin Diseases, 2; Ill-defined Illness, 9.—Total, 76 cases.

## VENEREAL DISEASES.

Dr. Ingram, the Medical Officer in charge of the Venereal Diseases Clinic, has supplied me with the following particulars, re treatment of Seamen who visited the Port during the year:—

	British Subjects 19 8				Foreigners		Total	
	White	Col'rd.	Total	Average past 3 ye'rs	1928	Average past 3 ye'rs	1928	Average past 3 ye'rs
Number of Patients Examined ...	107	13	120	95·3	45	37·7	165	133·0
Found to be suffering from V.D.								
Syphilis ...	52	7	59	31·3	27	21·0	86	52·0
Gonorrhœa .	48	5	53	47·0	17	12·0	70	59·0
TOTAL ...	100	12	112	78·3	44	32·7	156	111·0
Total Attendances	433	81	514	391·7	113	105·0	627	496·7

The number of patients examined, both British and Foreign, the number of cases diagnosed as Venereal Disease, and the number of attendances have shown a steady increase during the past four years.

The nationality of the foreigners examined, were:—Norwegians 6 (6, Spanish 10 (10), Danish 2 (2), Greek 9 (9), Swedish 4 (4), Arabs 4 (3), German 2 (2), Italian 3 (3), Russian 2 (2), and one each of the following nationalities:—Belgian, American and Dutch. The figures in brackets denote the number of positive cases.

The book issued by the Ministry of Health is supplied to each seaman patient, to ensure continuity of treatment at other ports.

The attendances made per patient, arranged according to nationality, were as follows: British (white) 4.0 (coloured, 6.2, and Foreign 2.5 per patient.

### NOTIFIABLE AND INFECTIOUS DISEASES.

Table II. gives a list of the vessels inspected under the "Cholera Plague, and Yellow Fever Regulations, 1907." Very few of the vessels arrived here direct from Infected Ports, and no vessel could be classified as "Infected" or "Suspected" on arrival.

Table III. contains a record of the Infectious Diseases which occurred during the voyage or after arrival of the vessels at Newport.

(a) Cases on board on arrival or that occurred during stay in port :—

Disease.	No. of cases during 1928	Average No. of cases for last 5 years.
Beri Beri ..	—	.2
Blackwater Fever ..	—	.2
Chicken Pox ...	2	1.0
Dysentery ...	—	.2
Influenza ..	6	10.4
Malaria ..	2	1.8
Measles ..	—	.2
Pneumonia ..	1	2.0
Scarlet Fever ..	1	.2
Tuberculosis ...	4	2.2
Typhoid Fever ..	2	1.0
Venereal Diseases ...	12	13.8
Total ..	30	33.2

The above figures include cases :—

1. Removed to Alltyn Hospital, Typhoid Fever, 2 ; Scarlet Fever, 1 ; and Chicken Pox, 2.  
Royal Gwent Hospital, Influenza, 1 ;  
Woolston House, Tuberculosis, 1 ;  
Seaman's Hospital, Cardiff, Venereal Disease, 1 ;  
Own Homes, Malaria Fever, 1 ; Venereal Disease, 1.
2. That attended "Out Patients" Clinic, Venereal Diseases, 3.
3. That were treated on board, Influenza 5, Malaria 1, Pneumonia, 1  
Tuberculosis 3, and Venereal Diseases 7.



(b) Cases of Infectious Sickness occurring on vessels during the voyage but disposed of prior to arrival :—

Disease.	No. of cases during 1928	Average No. of cases for last 5 years.
Beri Beri ...	—	·4
Chicken Pox ...	6	2·6
“Dinghy” Fever ...	2	·6
Dysentery ..	—	·6
Influenza ..	—	3·0
“Gastric” Fever ...	1	·2
Intermittent Fever ...	—	·2
“Low” Fever ...	2	·4
Malaria ..	11	12·0
Measles ...	—	—
Pneumonia ..	3	3·4
Scarlet Fever ...	—	·2
Small Pox ...	—	·4
“Spinal Meningitis” ..	1	·2
Tuberculosis ..	3	3·4
Typhoid Fever ...	1	1·8
Typhus Fever ..	1	·2
Venereal Diseases ...	7	6·4
Total ..	38	36·0

### DESTRUCTION OF RATS.

Close attention continues to be paid to this work. Rats are a source of serious nuisance on board ships and they consume or damage to a serious extent both food and edible cargoes, but the main reason for the active measures taken for their destruction is, of course, the fact that they are capable of spreading plague.

The methods adopted for destroying rats have been the same as in previous years, viz., fumigation with sulphur, trapping, ferretting and baiting. Sulphur has been found suitable and effective as a fumigant for cargo vessels for the destruction of vermin; it has not been found necessary or advisable to use the more dangerous and expensive process of Hydrocyanic Acid Gas.

28 vessels were subjected to measures of rat destruction, only 2 of these were from Plague Infected Ports. The bodies of 333 dead rats were discovered as a result. 6 of the 28 vessels were fumigated throughout with sulphur and 97 rats destroyed. The remainder were dealt with by baiting and trapping (236 rats destroyed).

8 certificates were issued for vessels that had been freed or were free from rats. 4 of these were in the form of “Port 10.”

The bodies of 4 rats were submitted for examination for the presence of the Plague Bacillus, but all proved negative.

A sum of £29 4s. 3d. has been received from owners for the work done on board ship and certificates provided (Deratisation: £15 11s. 1d.; Supervision of Fumigation: £5 5s. 2d.; Certificates: £8 8s. 0d.).

The work of rat destruction has not been confined to ships. Attention given to docks, quays, wharves and warehouses attached to docks resulted in the destruction of 2,756 rats, or more than eight times the number found on board ships. £2 11s. 0d. was received from owners of private premises for deratising work done.

From the accompanying table it will be seen that 21,760 baits were laid, 19,790 of these baits were laid on shore; and that the yield of rats by the various methods of destruction was:—Bait, 2,804; Traps, 92; Ferrets, 96; Fumigation, 97.

Of the 3,089 rats destroyed 2,284 were females and 805 males. 334 were of the Black and 2,755 of the Brown variety. Whilst no brown rats were discovered on board ships, only 1 black rat was found ashore.

I wish again to thank the Collector of Customs and his "Preventive" Staff, and the Clerk of the Pilotage Board for affording prompt and valuable assistance at all times in carrying out the Regulations, and to Inspector Jenkins and his Assistant, for their conscientious attention to their duties.

I have the honour to be,

Your obedient Servant,

J. HOWARD JONES,

Medical Officer of Health.

**TABLE shewing Methods used to destroy Rats and Results.**

	No. of Baits Laid	By Poison Bait and Rat Lime				Traps				Ferrets				Fumigation				Total Destroyed (Bodies Discovered)			
		Brown		Black		Brown		Black		Brown		Black		Brown		Black		Brown	Black		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
1st Quarter	5970	140	428	5	20	2	4	8	8	26	69	..	..	..	..	22	54	166	499	31	82
2nd Quarter	5110	197	546	25	53	..	6	29	..	..	..	..	..	..	..	5	8	197	546	36	90
3rd Quarter	5150	147	483	2	11	2	3	13	..	..	1	..	..	..	..	3	5	149	486	8	29
4th Quarter	5530	200	511	14	22	1	3	19	..	..	..	..	..	..	..	..	..	201	511	17	41
T'tals for 1928	21760	684	1968	46	106	3	16	69	26	70	..	..	..	..	30	67	713	2012	92	242	
T'tals for 1927	27093	887	2412	136	314	17	59	131	75	148	1	3	..	..	300	642	979	2615	496	1090	

3089  
5180

**TABLE shewing the No. of Baits laid Ashore and on Vessels and Dead Rats discovered during each month of the year 1928.**

Month	No. of Baits laid		NUMBER OF DEAD RATS DISCOVERED												Total Number of Rats Discovered	No. of Rats Examined	No. found infected with Plague
			On Vessels						On Shore								
	on Ves'sls		Ash're		Black		Brown		Black		Brown		Black		Brown		
	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	
January	2370	170	2200	31	..	24	..	..	..	..	..	90	232	322	..	..	
February	2300	100	2200	1	..	1	..	..	..	..	..	48	175	223	..	..	
March	1300	400	900	81	..	57	..	..	..	..	..	28	92	120	..	..	
April	1620	420	1200	32	..	22	..	..	..	..	..	59	158	217	2	..	
May	1740	100	1640	21	..	57	..	..	..	..	..	65	193	258	..	..	
June	1750	50	1700	16	..	11	..	..	..	..	..	73	195	268	..	..	
July	2030	50	1980	7	..	2	..	..	..	..	..	67	191	257	..	..	
August	2000	200	1800	19	..	3	..	..	..	..	..	52	191	243	..	..	
September	1120	100	1020	8	..	5	..	..	..	..	..	30	105	135	..	..	
October	1850	200	1650	2	..	18	..	..	..	..	..	59	184	243	2	..	
November	1880	180	1700	1	..	1	..	..	..	..	..	60	149	209	..	..	
December	1800	..	1800	14	..	22	..	..	..	..	..	82	178	260	..	..	
Totals 1928	21760	1970	19790	333	..	242	..	..	..	..	1	713	2042	2755	4	..	
Totals 1927	27093	2465	24628	492	..	1087	..	..	..	..	4	979	2615	3594	6	..	



TABLE II.

Vessels inspected under the Cholera, Yellow Fever, and Plague Regulations, 1907, of the Local Government Board

Date	Vessel.	Nation-ality	Whence	Where Inspected	Remarks
1928					
Jan. 2nd	Kazembe	British	East via Suez, Plymouth and Avonmouth	Alex. Dock	See Table IV.
3rd	Robert	Danish	Oporto via Valencia and Liverpool	do.	do.
9th	Antolycus	British	East via Suez, Dunkerque Hull, London and Swansea	do.	All well
16th	Tasmania	British	East via Suez, Dunkerque Hull, Hamburg, London, Manchester	do.	See Table III.
16th	Tregantle	British	Bombay via Suez Dundee Duukerque & London	do.	All well
18th	Johustown	British	Tunis via Dublin	do.	do.
19th	Somerset	British	East via Suez, Dunkerque Hull, Hamburg and London	do.	do.
23rd	Eurylochus	British	East via Suez, London and Liverpool	do.	do.
23rd	Australia	British	East via Suez and London	do.	do.
23rd	Loreuzo	British	East via Suez, Dunkerque Hull, London, Antwerp and Birkenhead	do.	do.
23rd	Toyooka Maru	Japan'se	East via Suez, Marseilles, Barcelona, Valencia Glasgow and Swansea	do.	do.
24th	Rhio	British	Oran	do.	do.
30th	Elva Seed	British	Sfax. Oran and Liverpool	do.	do.
30th	Harmonides	British	Malabar Coast, via Suez, Oran, London and Dunkerque	do.	do.
30th	Clan Murdock	British	East via Suez, Dunkerque Hull and London	do.	See Table IV.
30th	Nnddea	British	East via Suez, Oran, Duukerque, Hull and London	do.	All well
30th	Dimitros L Daniolos	Greek	Piræus via Rotterdam	do.	do.
31st	Blackheath	British	South Shields	do.	do.
Feb. 6th	"hrockley	British	Algiers	Ebbw Vale Wharf	do.
10th	Daka Maru	Japan'se	East via Suez, Genoa, Marseilles, Valencia and Liverpool	Alex. Dock	do.
10th	Gerzina	Nwgn.	Alexandria via Oran and Liverpool	do.	See Tables III & IV.
16th	Sigrid	Danish	Oporto via Valencia and Liverpool	Arrow Wharf	See Tables III & IV.

TABLE II—continued.

Date	Vessel	Nationality	Whence	Where Inspected	Remarks
1928 Feb-20th	Magdapur	British	Calcutta via London, Hamburg, Rotterdam, Dundee and Glasgow	Alex Dock	All well
20th	Opollo	Italian	Oran via Falmouth	Ebbw Vale Wharf	See Tables III and IV.
21st	City of Baroda	British	East via Suez, Barcelona, Liverpool, Manchester and Swansea	Alex. Dock	All well
22nd	Antinea	French	Bona, Algiers and Rouen	Arrow Wharf	do.
23rd	Goleta	British	East via Suez, Algiers, Avonmouth and Swansea	Bailey's Dry Dock	do.
23rd	Lilburn	British	Oporto via Seville and Heysham	Alex Dock	do.
25th	City of Rangoon	British	Tyne	do.	See Table IV.
25th	Scandinavic	Swedish	Tunis via Bordeaux	do.	All well
27th	Buteshire	British	East via Suez, Algiers, Dunkerque, Hull, Lon- don and Cardiff	do.	do.
28th	Annoula	Greek	Oran	do.	do.
Mar. 1st	Amasis	British	Alexandria via Liverpool	do.	do.
2nd	Arabistan	British	East via Suez, Oran, Avonmouth, Glasgow and Manchester	do.	See Table III
5th	Clan Ogilvy	British	East via Suez, Oran, London, Dundee and Antwerp	do.	See Tables IV and IVa.
5th	Remenham	British	Alexandria via Hull	do.	All well
6th	Wordsworth	British	Piraeus via Hamburg	Arrow Wharf	do.
9th	Durban Maru	Japan'se	East via Suez, Genoa, Marseilles, Valencia and Liverpool	Alex. Dock	do.
14th	Disa	Swedish	Algiers	do.	do.
15th	Pangbourne	British	Lisbon via London	Arrow Wharf	do.
16th	Clan Mackenzie	British	East via Suez, Dunkerque, Hull, Antwerp and London	Alex. Dock	See Table IV.
19th	Helenus	British	East via Suez, Amsterdam, London, Hamburg, and Swansea	do.	All well
19th	Grandlieu	French	Middlesbro	do.	do.
20th	City of Athens	British	East via Suez, London, Dunkerque & Barrow	do.	See Table IV.
21st	Alfred Nobel	Norw'gn	Bombay via Suez, Leith, Rotterdam & Antwerp	do.	See Tables IV and IVa
23rd	Lynntown	British	Algiers	Ebbw Vale Wharf	All well

TABLE II—continued.

Date	Vessel	Nation- ality	Whence	Where Inspected	Remarks
1928 Mar. 26th	Kingsbury	British	Port Said, via Phillipville	Alex. Dock	All well
26th	Lady Charlotte	British	South Shields	do.	do.
27th	Wangaratta	British	East via Suez, Malta, Oran London, Hamburg & Liverpool	do.	do.
27th	Georgios Salairas	Greek	Piraeus, Oran and Rot- terdam	do.	do.
28th	Massillia	British	East via Suez, Marseilles, Liverpool and Swansea	do.	do.
28th	Bassano	British	East via Suez, Oran, Lon- don and Antwerp	do.	do.
29th	Circassia	British	East via Suez, Marseilles and Liverpool	do.	do.
Apr 2nd	Registan	British	East via Suez, Plymouth, Avonmouth and Man- chester	do.	do.
2nd	Explorer	British	East via Suez, London Liverpool and Man- chester	do.	See Table III.
3rd	Gezina	Nwgn.	Lisbon Via Oporto	do.	All well
4th	Portgwarra	British	Calcutta via Suez, Algiers, Rotterdam & Hamburg	do.	See Tables III & IV, A,
4th	Clan Macquarrie	British	East via Suez, Dunkerque Hull, London, Liver- pool and Avonmouth	do.	All well
5th	Mandalay	British	East via Suez, Falmouth, Cardiff & Birkenhead	do.	do.
11th	Admiral Cochrane	British	Beyrout via Alexandria and London	do.	do.
12th	Nerbudda	British	East via Suez, Dunkerque Hull, Anwerp & London	do.	do.
12th	Rhexenor	British	East via Suez, Amsterdam London and Falmouth	do.	do.
13th	Clan Urquhart	British	East via Suez, Oran, London, Hamburg and Avonmouth	do.	do.
13th	Clan Mactavish	British	East via Suez, Dunkerque Hull, Antwerp and London	do.	do.
16th	Delagoa Maru	Japan'se	East via Suez, Genoa, Marseilles, Liverpool and Swausea	do.	do.
21st	Marculos V. Polemi	Greek	Middlesbro	do.	See Table IV.
23rd	Clan Macilwraith	British	East via Suez, Oran, Liv- erpool and Glasgow	do.	See Table III
25th	Peshawur	British	East via Suez, Dunkerque Hull, London and Liverpool	do.	All well
25th	Fintra	British	Arzew via Sunderland	do.	do.
26th	Chumleigh	British	East via Suez, Oran and Hamburg	do.	do.

TABLE II—continued.

Date	Vessel.	Nation- ality.	Whence	Where Inspected	Remarks
1928 Apr. 26th	Anfora	Italian	East via Suez, Bona, Plymouth, Greenock and Dunkerque	Alex. Dock	All well
30th	City of Durban	British	Middlesbro	do.	do.
30th	Singleton Abbey	do.	Lisbon	do.	do.
May 2nd	M de R. Garcia	Spanish	Algiers	Ebbw Vale Wharf	do.
8th	Greleden	British	Bombay via Suez, Oran, Hull and Dunkerque	Bailey's Dry Dock	do.
9th	Lyons Maru	Japan'se	East via Suez, Genoa, Marseilles, Valencia, Liverpool & Glasgow	Alex. Dock	do.
10th	City of Christiania	British	East via Suez, Malta, Oran, Liverpool and Glasgow	do.	See Table IV <sub>A</sub> .
14th	Mokta	do	Middlesbro	do.	All well
14th	Nardana	do.	East via Suez, Dunkerque, Hull, Antwerp and Liverpool	do.	do.
14th	Lycaon	do.	East via Suez, Amsterdam, London & Hamburg	do.	do.
21st	Kirktown	do.	Algiers	do.	See Table IV <sub>A</sub> .
23rd	Udondo	Spanish	Algiers via Rotterdam	do.	All well
24th	Maidan	British	East via Suez, Naples and Hamburg	do.	do.
30th	Clan Mactaggart	do.	East via Suez, Rotterdam and Hamburg	do.	do.
June 5th	Westbury	do.	East via Suez, Algiers and Rotterdam	do.	do.
8th	Matheos	Greek	Piraeus via Algiers	Ebbw Vale Wharf	do.
11th	Fred Cleeves	British	Algiers	do.	See Table IV <sub>A</sub> .
11th	Halizones	do.	East via Suez, Oran, London, Hamburg & Dunkerque	Alex. Dock	See Tables III & IV <sub>A</sub> .
11th	Lima Maru	Japan'se	East via Suez, Barcelona, Valencia, Marseilles and Liverpool	do.	All well
11th	Phemius	British	East via Suez, Marseilles, Amsterdam, London and Falmouth	do.	do.
12th	Cor Jesu	Italian	Oran	do.	do.
13th	Luceline	British	Lisbon	do.	do.
15th	Clan Malcolm	do.	Bombay via Suez, Venice and Gibraltar	do.	See Tables IV & IV <sub>A</sub> .
21st	Catherine Radcliffe	do.	South Shields	do.	See Table IV

TABLE II—continued.

Date	Vessel	Nationality.	Whence	Where Inspected	Remarks
1928 Jun. 25th	Woodarra	British	East via Suez, Oran, London, Hamburg, Antwerp, Liverpool & Cardiff	Alex Dock	See Table III
July 3rd	Newbury	do.	Indian Coast via Suez and Hamburg	do.	All well
9th	Eurylochus	do.	East via Suez, Havre and Liverpool	do.	do.
17th	Lenfield	do.	Bombay via Suez, Barcelona & Dunkerque	do.	do.
19th	Vera Radcliffe	do.	East via Suez, Algiers, Hull, Leith, Antwerp and Cardiff	do.	do.
23rd	Clan Macbeth	do.	East via Suez, Algiers and Liverpool	do.	do.
23rd	Toyohashi Maru	Japan'se	East via Suez, Valencia, London, Hull, Rotterdam, Hamburg and London	do.	do.
26th	Wimborne	British	Karachi via Suez, Algiers, Hamburg & Rotterdam	do.	See Table IV.
30th	City of Auckland	do.	Bombay via Suez, Portland and Hull	do.	See Table III
Aug. 1st	Zero Carras	Greek	Alexandria	do.	See Table IV.
2nd	Matopo	British	East via Suez, Oran, Avonmouth, London, Hamburg & Antwerp	do.	See Table IV A
13th	Clan Maciver	do.	East via Suez, Oran and London	Tredegar Dry Dock	All well
13th	Lolin	Spanish	Algiers	Alex. Dock	do.
13th	Dakar Maru	Japan'se	East via Suez, Genoa, Marseilles, Valencia and Liverpool	do.	do.
15th	Clan Mackinlay	British	East via Suez, Oran and Hamburg	Tredegar Dry Dock	See Tables III & IV.
15th	Hannah	do.	South Shields	Alex. Dock	See Table IV A
16th	Bedeburn	do.	Lisbon	do.	All well
20th	Montauban	French	Oran, Mostaganem and Brake	do.	do.
22nd	Architect	British	East via Suez, Algiers, Avonmouth and Liverpool	do.	do.
30th	Clan Macilwraith	do.	Rangoon via Suez, Algiers and Trieste	do.	do.
Sept. 1st	Deucalion	do.	East via Suez, Alexandria, Marseilles, London, Amsterdam and Liverpool	do.	do.
2nd	Buteshire	do.	East via Suez, Hull, London, Manchester, Liverpool & Avonmouth	Bailey's Dry Dock	See Tables III & IV
3rd	Kent	do.	East via Suez, Dunkerque, London, Antwerp, Hamburg, Liverpool and Swansea	Alex. Dock	All well



TABLE II—continued.

Date	Vessel	Nationality	Whence	Where Inspected	Remarks
1928 Sep. 24th	W. I. Radcliffe	British	East via Suez, Algiers, London and Hull	Alex Dock	See Table I VA
27th	Isca	French	Tunis via Bristol	Arrow Wharf	All well
Oct. 1st	Telemachus	British	East via Suez, Antwerp, London and Hull	Alex. Dock	do.
1st	Surrey	do.	East via Suez, Dunkerque Hull, Antwerp. Lon- don, Liverpool and Swansea	do.	do.
2nd	Dunafric	do.	Lisbon	do.	See Table IV
3rd	Cor Jesu	Italian	Algiers	do.	All well
15th	Clan Urquhart	British	East via Suez, Algiers, London and Swansea	do.	do.
17th	K. Eleni	Greek	East via Suez Oran. Rot- terdam and Hamburg	do.	do.
18th	Delagoa Maru	Japan'se	East via Suez. Genoa. Valencia, Liverpool and Glasgow	do.	do.
18th	Matheos	Greek	Piraeus via Bougie	Ebbw Vale Wharf	do.
19th	Malmesbury	British	Alexandria	Alex. Dock	do.
19th	Elysia	do.	East via Suez. Marseilles and Liverpool	do.	do.
22nd	City of Bristol	do.	Indian Coast via Suez, London Hull, Ham- burg and Liverpool	do.	do.
27th	Artreus	do.	East via Suez. London and Liverpool	do.	do.
29th	Mataban	do.	East via Suez, Oran, London and Dundee	do.	do.
31st	Southgate	do.	East via Suez, Trieste, Barcelona, Valencia, Cadiz and Bilbao	Bailey's Dry Dock	do.
Nov. 6th	Clan Macnair	do.	East via Suez. Oran, London & Dunkerque	Alex. Dock	do.
12th	Leitrim	do.	East via Suez, London, Hull, Antwerp, Liver- pool and Swansea	do.	do.
12th	Brinkburn	do.	Oran via Preston	do.	do.
15th	Clan Macneil	do.	East via Suez. London, Dundee and Hamburg	Tredgar Dry Dock	do.
30th	Inventor	do.	East via Suez, London, Liverpool and Man- chester	Alex. Dock	do.
Dec. 1st	Pentreath	do.	Alexandria via Bristol	do.	do.
6th	Kantara	do.	Alexandria via Smyrna and Liverpool	do.	do.
7th	Clan Ross	do.	East via Suez, Oran, London, Dundee and Dunkerque	do.	do.
10th	Georgios S. Salaris	Greek	Alexandria via Liverpool	do.	do.

TABLE II—continued.

Date	Vessel	Nationality	Whence	Where Inspected	Remarks
1928					
Dec. 12th	Clan Stuart	British	East via Suez, London and Dundee	Alex. Dock	All well
12th	Ensign	do.	Lisbon via Ronen	do.	do.
14th	Clan Macfadyen	do.	East via Suez, Marseilles, London and Antwerp	do.	do.
15th	Lyminge	do.	Lisbon	do.	do.
20th	Pinhell	P'tguese	Lisbon	do.	do.
21st	Lima Maru	Japan'se	East via Suez, Genoa, Valencia, Liverpool and Glasgow	do.	See Table IVA
24th	City of Florence	British	East via Suez, London, Rotterdam and Hull	do.	All well
27th	Kesenga	do.	Rangoon via Suez, London, Hull, Antwerp and Liverpool	do.	do.
27th	Euryades	do.	East via Suez, London, and Hamburg	do.	do.



TABLE III.

List of Vessels which had cases of Infectious Diseases on board during voyage, or after arrival in Newport.

Date	Vessel	Nationality	Whence	Nature of Sickness and Action taken
1928				
Jan. 4th	Trongate	British	Antwerp	3 a.b's., Venereal Disease treatment on board
9th	Asse	Danish	Bristol	1 Cabin boy, Malaria Fever, sent home Denmark on arrival
18th	Tasmania	British	Manchester	1 Fireman Influenza and Bronchitis, removed R.G Hospital
25th	Molesey	do.	Odense	1 a.b. Venereal Disease, landed Hospital Dartmouth
Feb. 11th	Gezina	Norwegian	Liverpool	1 a.b. Venereal Disease, removed Seaman's Hospital, Cardiff
15th	Frank Seamans	do.	Sunderland	1 Fireman Venereal Disease, sent home to Norway
15th	Panama Transport	British	London	2, 1 a.b., 1 Fireman, Venereal Disease, former landed Hospital Buenos Ayres, latter landed Hospital Las Palmas
15th	Clan Mackinley	do.	Hamburg	3 Lascar Firemen Consumption 1 landed Hospital Colon 1/12/27 1 died Bermuda, 27/12/27, 1 off duty on arrival, had Medical attendance, to be landed on arrival Glasgow
16th	Sigrid	Danish	Liverpool	1 Fireman, Venereal Disease, treatment on board
17th	Laomedon	British	Glasgow	1 a. b. off duty, Influenza treatment on board
20th	Opollo	Italian	Falmouth	1 Wireless Operator, Venereal Disease, attending R.G. Clinic
22nd	Sabor	British	Hamburg	1 Fireman, Venereal Disease, landed Hospital Havre 7/2/28
Mar. 2nd	Arabistan	do.	Manchester	1 Lascar a.b. Venereal Disease, landed Hospital Avonmouth, 2/2/28
8th	Maresfield	do.	Antwerp	1 Fireman, Bronchitis, admitted Woolston House Infirmary, 8/3/28, subsequently notified Tuberculosis 10/3/28
16th	Orangemoor	do.	Birkenhead	1 Fireman Venereal Disease, paid off Falmouth and sent home to Hull 13/3/28
April 2nd	Explorer	do.	Manchester	2, 3rd Officer and W. Operator Low Fever, landed Hospital Colombo, 4/2/28
4th	Portgwarra	do.	Hamburg	2 Fireman and Steward, Dingly Fever, landed Hospital Calcutta 8/12/27
4th	Bassano	do.	Antwerp	1 Lascar a. b. Tuberculosis treatment on board

TABLE III.—continued.

Date	Vessel	Nationality	Whence	Nature of Sickness and Action taken
1928 Apr. 23rd	Clan Macilwraith	British	Glasgow	1 Lascar a.b. Pneumonia, treatment on board
25th	Nalon	Spanish	Bilbao	1 2nd Officer Venereal Disease attending R G. Clinic
May 19th	Sardinero	do.	Bilbao	4. Donkeyman, 2 Firemen, 1 a. b. Influenza, treatment on board
June 13th	Halizones	British	Dunkerque	1 Quartermaster (Lascar) Typhoid Fever, removed Allt-yr-yn, Hospital, Quarters and effects disinfected.
25th	Woodarra	do.	Cardiff	2. Steward, Pneumonia, landed Hospital. London 25/5/28. Cadet Typhoid Fever, landed Hospital Cardiff 14/6/28
July 21st	Artensis	Norwegian	Sharpness	1 Fireman, Venereal Disease treatment on board
31st	City of Auckland	British	Hull	1 Lascar a. b. Malaria Fever treatment on board
Aug 9th	Siris	do.	Hamburg	1 Fireman Gastric Fever, landed Hospital Havre 22/7/28
15th	Clan Mackinlay	do.	Hamburg	1 Lascar Fireman Spinal Meningitis, landed Hospital Hamburg 30/7/28
24th	do.	do.	do.	1 Lascar Fireman, Typhoid Fever removed to Allt-yr-yn Hospital Quarters and effects disinfected
28th	Tirrena	Italian	Belfast	1 Carpenter, Typhus Fever, landed Hospital Belfast 2/8/28
Sept. 2nd	Buteshire	British	Avonmouth	6. 4 lascars a. b.'s 2 firemen, Chicken Pox, landed Hospital Avonmouth 31/8/28
17th	do.	do.	do.	2 1 lascars a. b., 1 fireman, Chicken Pox, removed Allt-yr-yn Hospital, quarters disinfected.
Oct, 1st	Bengal Maru	Japanese	Liverpool	1 Fireman Tuberculosis, treatment on board by Ship's Surgeon
6th	Egyptian Transport	British	Antwerp	2. 4th Engineer Pneumonia, landed Hospital Rosaria. 1 a. b. Pneumonia, landed Hospital Santa Fe
16th	Willem Rene	Belgian	Antwerp	1 a. b. Venereal disease, treatment on board
27th	Mahseer	British	Avonmouth	1 Lascar a. b. Venereal disease, treatment on board
Nov, 4th	Northumberland	do.	London	1 Cadet Scarlet Fever, removed Allt-yr-yn Hospital. Quarters and effects disinfected.
10th	Tide way	do.	Genoa	1 Chief Officer Tuberculosis, landed Hospital Genoa 27/10/28

TABLE III.—continued.

Date	Vessel	Nationality	Whence	Nature of Sickness and Action taken
1928 Nov.16th	Drakepool	British	Antwerp	1 Fireman Venereal Disease, landed Hospital Montreal, 18/10/28
26th	Arraiz	Spanish	Bilbao	1 Chief Officer, Venereal disease attending R.G. Clinic
Dec,10th	Lifland	Danish	West Coast Africa via Bordeaux	11 members of crew Malaria Fever, landed Hospital Bordeaux 27/11/28-5/12/28. Vessel disinfected. 1 a b.died 30/11/28 in Bordeaux Hospital. Remainder of crew recovered and were sent home to Denmark

TABLE IV.

Vessels visited during stay in Port, owing to having non-notifiable sickness on board the patients being attended by Medical Practitioner engaged by the Master.

Date.	Vessel.	Nationality	Whence	No. of Sick and Remarks.
1928. Jan. 2nd	Kazembe	British	Avonmouth	1 Cook (Native) off duty Colitis, treatment on board
3rd	Robert	Danish	Liverpool	2 Firemen ; 1 Tonsillitis, 1 Lumbago, treatment on board
3rd	Clan Keith	British	Swansea	1 Lascar Fireman, Intestinal Complaint, treatment on board
17th	Clan Murray	do.	Bremerhaven	1 Chief Officer off duty, injury to leg. treatment on board
21st	Dip'omat	do.	Liverpool	1 Lascar a b. accident, treatment on board
30th	Clan Murdoch	do.	London	2 Native Stewards, colds, treatment on board.
Feb. 7th	Ravenshoe	do.	Rotterdam	1 a.b. off duty on arrival, cancer of Liver, removed to Seamen's Hospital, Cardiff
16th	Sigrid	Danish	Liverpool	1 Cook off duty, Gastritis, treatment on board
20th	Opollo	Italian	Falmouth	2 Chief Officer and 1 a.b. off duty, feverish colds, treatment on board
21st	Laomedon	British	Glasgow	1 Chinese Fireman injury to eye, attended at Royal Gwent Hospital
22nd	Atland	Swedish	Antwerp	1 Fireman off duty, burns, treatment on board
25th	City of Rangoon	British	Tyne	1 Chief Officer off duty, accident injury to hand, treatment on board
25th	Zinova	Greek	Sligo	1 Fireman off duty, feverish cold, treatment on board
Mar. 5th	Clan Ogilvy	British	Antwerp	1 Lascar a b. off duty, Asthma, treatment on board
13th	Wrotham	do.	Bilbao	1 O.S. off duty, feverish cold, treatment on board
20th	Huntsman	do	Greenock	3 Chief Officer and 2 Firemen (Lascars), chills, treatment on board
20th	California	Danish	Esbjerg	1 motorman off duty, injury to eye, treatment on board
21st	Alfred Nobel	Norwegian	Antwerp	1 Fireman off duty, abscess, treatment on board
21st	City of Athens	British	Barrow	1 Lascar Fireman off duty, nervous debility, treatment on board
21st	Clan Mackenzie	do.	London	4 Lascars, 1 Fireman, Internal Piles; 3 a.bs. colds, treatment on board

TABLE IV—continued.

Date.	Vessel	Nationality	Whence	No. of Sick and Remarks.
1928 Mar. 23rd	Ada	British	Bridgewater	1 a.b. accidentally fell down Hold, admitted to Royal Gwent Hospital
26th	Islington	do.	Antwerp	1 a.b. off duty, feverish cold, treatment on board
April 2nd	Slesvig	Danish	Esfjorg	1 a.b. off duty. Eczema admitted Royal Gwent Hospital
11th	Clara Knutsman	German	Birkenhead	2 a.b. and Boswain off duty, Bronchitis and Lumbago, respectively, treatment on board
12th	Zelos	Swedish	Bordeaux	1 Death drowning accidental, a.b. fell off gangway, Tredegar Wharf
21st	Maroulos V. Polemi	Greek	Middlesbro	1 Master, feverish cold, treatment on board
24th	Framlington Court	British	Cardiff	1 Carpenter, Intestinal Complaint removed to Royal Gwent Hospital
25th	Northumberland	do.	Glasgow	1 O.S. off duty, feverish cold, removed to Royal Gwent Hospital, 1 5/28
May 7th	Olivine	do.	Dublin	2. 1 Fireman, Appendicitis, removed to Royal Gwent Hospital; 1 Fireman Injury to shoulder accident, attending Royal Gwent Hospital
14th	Mokta	do.	Middlesbro	1 O.S. off duty, cold, treatment on board
31st	Berwickshire	do.	Avonmouth	3 Lascars, 1 Fireman, 2 a.bs. Pils. Injury and Mental, respectively, treatment on board
June 11th	Halizones	do.	Dunkerque	1 Lascar a.b. off duty, feverish treatment on board
11th	Ilunzar Mendi	Spanish	Ardrossan	1 a.b. off duty, Injury to hand, treatment on board
12th	Antonietta	Italian	Genoa	2 Firemen off duty. Intestinal Complaint, treatment on board
15th	Clan Malcolm	British	Venice	3 Lascars, 2 a.b's., 1 Boy, Gastritis, Bronchitis, Intestinal Complaint, respectively, treatment on board
21st	Catherine Radcliffe	do.	South Shields	1 Fireman, accident, injury to hand, attending Royal Gwent Hospital
27th	Clan Macdonald	do.	Glasgow	1 Lascar a.b., accident, treatment on board
July 23rd	Artensis	Norwegian	Sharpness	1 3rd Engineer, Gastritis, treatment on board



TABLE IV.—continued.

Date.	Vessel	Nationality.	Whence.	No. of Sick and Remarks.
1928				
July 26th	Sutherland	British	London	1 Master, feverish cold, treatment on board
26th	Wimborne	do.	Rotterdam	1 Steward, accident, treatment on board
Aug. 1st	Zero Carras	Greek	Alexandria	2, 1 Messrom Steward. Intestinal Complaint, removed to Royal Gwent Hospital, 4/8/28; 1 Fireman, Heart Disease, removed to Woolston House Infirmary
20th	Clan Mackinlay	British	Hamburg	2 Lascars a b's.. Gastritis and Bronchitis, respectively, former removed to Royal Gwent Hospital; latter to Woolston Infirmary
21st	Francisco Garcia	Spanish	Bilbao	1 a b. off duty, Piles, treatment on board
Sept. 12th	Buteshire	British	Avonmouth	3 Lascars, 1 a.b., 2 Firemen, Asthma, Piles, Intestinal Complaint, respectively, treatment on board
18th	City of Paris	do.	Greenock	2, 2nd Engineer, 1 Fireman, off duty injuries, treatment on board
19th	Manaar	do.	London	1 Lascar a.b., Bronchitis, removed to Woolston Infirmary
Oct. 2nd	Dunafric	do.	Lisbon	1 3rd Engineer, Intestinal Complaint, treatment on board
8th	Sithonia	do.	Garston	1 a.b. off duty, accident, attending Royal Gwent Hospital
15th	Tekoa	do.	Swansea	1 a.b. off duty, accident, treatment on board
15th	Cristina	do.	Hornillo	1 a.b. off duty, Piles, treatment on board
18th	Katwijk	Dutch	Caen	1 a.b. off duty, poisoned hand, treatment on board
22nd	Volturno	Italian	Rotterdam	1 Fireman off duty, Bronchitis, removed to Royal Gwent Hospital
25th	Bampton Castle	British	London	2 1 Death.a.b. accident, fell down Hold; 1 a.b., accident, removed to Royal Gwent Hospital
27th	Makseeer	do.	Avonmouth	1 Lascar a.b., cold, treatment on board
30th	Grigorios C.	Greek	Bougie	1 a b off duty. Enlarged Glands and Acne, treatment on board
Nov. 8th	Tcifi	British	Bideford	1 Chief Engineer, Sciatica, treatment on board
15th	Konstan	Spanish	Bilbao	1 a b. off duty, accident, treatment on board

TABLE IV.—continued.

Date.	Vessel.	Nationality.	Whence.	No. of Sick and Remarks.
Nov. 19th	Volturno	Italian	Barrow-in-Furness	3, 1 a.b. Rheumatism. 2 Firemen, injuries, treatment on board
21st	Acton Manor	British	Nantes	1 Fireman, accident, removed to Royal Gwent Hospital
21st	Graslin	French	Barry	1 Cook Boy, accident, removed to Royal Gwent Hospital
26th	Hesperia	British	Glasgow	1 Fireman off duty, accident, treatment on board
Dec. 10th	Kjerinde Dagmar	Danish	Coruna	1 Chief Engineer off duty, accident, attending Royal Gwent Hospital
17th	Marianne	Swedish	Ghent	1 Fireman off duty. Gastritis, treatment on board
17th	Willem Rene	Belgian	Antwerp	1 a. b. off duty, Acne, treatment on board
27th	N. J. Ohlsen	Danish	Wisbech	1 a. b. off duty, accident, treatment on board



TABLE IV<sup>A</sup>

Shewing cases of non-notifiable sickness occurring during the voyages, and which were reported on arrival.

Date	Vessel	Nationality	Whence	Nature of Sickness and Action taken
1928 Jan. 9th	Songdal	Norwegian	Hornillo	1 o.s., accident, landed Hospital Hornillo, 24/12/27
11th	Greatend	British	Swansea	3 a b's. off duty, 1 accident, 2 ill, Observation cases, sent home from Swansea to Tyne
14th	Jupiter	Norwegian	Helsingborg	1 Fireman off duty, nervous debility, sent home Norway
17th	Memphis	British	Cardiff	1 a.b. off duty Lumbago, paid off Cardiff, 13/1/28
20th	Oakgrove	do.	Decido	1 Master, Dyspepsia, treatment on board
25th	Molesey	do.	Odense	8, Engineer and 7 a.b's. landed Hospital Alexandria, accident caused by explosion
Feb. 7th	Ravenshoe	do.	Rotterdam	1 a b. off duty on arrival, Cancer of Liver, removed R.G. Hospital
10th	Gezina	Norwegian	Liverpool	1 a b. off duty on arrival, Nervous Debility, had medical attention
15th	Clan Mackinlay	British	Hamburg	1 Chief Officer off duty on arrival Accident at sea, had medical attention and left for home
21st	Lynton Grange	do.	Rotterdam	1 Death, accidental, a b. at San Nicholas, 25/12/27
Mar. 2nd	Arabistan	do.	Manchester	1 Lascar a.b. accident, landed Hospital, Avonmouth 2/2/28
5th	Clan Ogilvy	do.	Antwerp	1 Lascar boy, Rheumatism, landed Hospital London 13/2/28
16th	Orangemoor	do.	Birkenhead	1 Fireman, Varicose Veins, sent Home from Falmouth 13/2/28
21st	Alfred Nobel	Norwegian	Antwerp	1 Fireman off duty, Antwerp, had medical attention 14/3/28
Apr. 2nd	Rhodesian Transport	British	Rotterdam	2, 4th Engineer landed Hospital Buenos Ayres, Intestinal Complaint 10/2/28. 1 a.b. landed Hospital Rotterdam, mentally affected 24/3/28
2nd	Slesvig	Danish	Esfjord	1 a.b. Eczema, removed to R G Hospital on arrival
4th	Portgwarra	British	Hamburg	3, 2 a.b's. accident, landed Hospital Calcutta 11/12/27. Chief Officer. accident, landed Hospital Madras 24/1/28
18th	Gwentland	do.	Antwerp	1 Donkeyman, accident landed Hospital Bilbao, 1/4/28
18th	Ingo	Norwegian	Pauillac	2 Firemen off duty, Pauillac, colds, recovered and completed voyage

TABLE IV<sub>A</sub>—continued.

Date	Vessel	Nationality	Whence	Nature of Sickness and Action taken.
Apr, 25th	Northumberland	British	Glasgow	1 o. s. off duty on arrival, Feverish cold, medical attendance provided
26th	Orange River	do.	Liverpool	1 Fireman, Hernia, landed Hospital, Liverpool
May 5th	Llanberis	do.	London	1 Apprentice, Appendicitis, landed Hospital London
10th	City of Christiania	do.	Glasgow	1 Master, Eczema, landed Hospital, Malta
11th	Oakland Grange	do.	Manchester	1 Fireman, Rheumatism, landed Hospital Buenos Ayres 23/3/28
12th	Laleham	do.	Calais	1 death accidental, 3rd Officer fell down hold Poti, 11/3/28
14th	Stonegate	do.	Antwerp	1 Fireman died, Heart Failure Buenos Ayres, 29/3/28
14th	Cape Transport	do.	Rotterdam	1 Fireman, Eye Affection, landed Hospital Montevideo 27/3/28
17th	Mostyn	do.	Bilbao	1, 2nd Officer, Bright's Disease, left for home on arrival
19th	Kirktown	do.	Algiers	1 Ma ter, Muscular Rheumatism Medical Attendance
31st	Berwickshire	do.	Avonmouth	1 Lascar a. b. Piles, had Medical attendance, Avonmouth
June 11th	Halizones	do.	Dunkerque	1 Lascar Cook, Heart Disease Landed Hospital Hamburg 31/5/28
13th	Fred Cleeves	do.	Algiers	1 a. b. Accident at sea, sent home to Tyne
15th	Clan Malcolm	do.	Venice	1 Lascar a. b. Appendicitis, landed Hospital Gibraltar 4/6/29
19th	Gretaston	do.	London	4, Cook's boy landed Hospital, Rio-de-Janeiro, Observation, 1/4/28. Bowswain Rheumatism landed Hospital Buenos Ayres, 14/4/28. Fireman, Dyspepsia, landed Hospital Buenos Ayres, 14/4/28. 1 a. b. accident, landed Hospital London 28/5/28
July 21st	Artensis	Norwegian	Sharpness	1 Fireman, Rheumatism, landed Hospital Falmouth, 14/7/28
21st	Severn	British	Hamburg	1 3rd Officer accident, landed Hospital Antwerp 7/7/28
23rd	Cheniston	do.	Gijon	1 a. b., accidentally drowned, Gijon, 8/7/28
Aug. 2nd	Matopo	do.	Antwerp	1 Lascar a. b. Rheumatism, landed Hospital London 17/7/28
4th	Clytha	do.	Sharpness	1 Fireman, accident. Injury to Arm, medical attendance provided Sharpness
15th	Hannah	do.	South Shields	1 Fireman off duty on arrival, 12/8/28, medical attendance provided, Gastritis

TABLE IV<sub>A</sub>—*continued.*

Date	Vessel	Nationality	Whence	Nature of Sickness and Action taken.
Aug. 28th	Zapala	British	Rotterdam	1 Cook, Cerebral Disease, landed Hospital, Buenos Ayres, 10/7/28
Sep. 20th	Azul	do.	Hamburg	2, 1 Fireman, observation, landed Hospital Bahia Blanca, 3/7/28, 1 Fireman, Blood Poisoning, landed Hospital, Bahia Blanca 30/7/28
24th	Salado	do.	Rotterdam	1 Fireman, observation, landed Hospital, Las Palmas, 3, 9/28
24th	W. I. Radcliffe	do.	Hull	2, Apprentice, accident at sea, landed Hospital, Perim, 21/6/28, Fireman murdered at sea, 6, 8/28
26th	Sarthe	do.	Hamburg	1 Cadet Appendicitis, landed Hospital Hamburg, 22/9/28
Oct. 20th	Gwentgate	do.	Antwerp	1 D. B. S. missing at sea, 17/10/28 presumed lost overboard
20th	Volturmo	Italian	Rotterdam	1 Fireman ill on arrival, removed R. G. Hospital, 22/10/28, Bronchitis
23rd	American Transport	British	Manchester	1 Fireman, accident, landed Hospital Las Palmas, 2/10/28
Nov. 22nd	Losada	do.	Salaverry	1 Carpenter, missing at sea, 19/11/28, presumed washed overboard
29th	Derwent River	do.	Hull	1 a. b. accident, landed Hospital Hull 2/11/28
Dec. 3rd	Banderas	Spanish	Bilbao	1 a. b. Quinsey, landed Hospital Bilbao, 19/11/28
12th	Clan Stuart	British	Dundee	1 Lascar Firemen, Observation, landed Hospital London 6/12/28
17th	Canadian Transport	do.	Amsterdam	1 Fireman, Appendicitis, landed Hospital Buenos Ayres
17th	Nirvana	do.	Barry	1 Lascar Fireman, Growth under Tongue, landed Barry 6/12/28
17th	Marianne	Swedish	Ghent	1 Fireman, ill on arrival, medical attendance provided
21st	Lima Maru	Japanese	Glasgow	1 Carpenter, accident, landed Hospital Liverpool 15/12/28

# INSPECTOR'S REPORT, 1928.

PORT SANITARY OFFICE,  
TOWN HALL, NEWPORT.

*To the Chairman and Members of the Port Sanitary Committee:*

GENTLEMEN,

I beg to submit to you my Annual Report for the year 1928, on the following subjects:—

- I.—The Inspection of Vessels.
- II.—The Administration of the Board of Agriculture “Landing of Dogs Order.”
- III.—Foreign Animals Order.
- IV.—Public Health Foreign (Meat and Unsound Food).
- V.—Vessels from Cholera, Plague and Yellow Fever, Infected Areas.
- VI.—Public Health Meat Regulations, 1924

## INSPECTION OF VESSELS.

The duties are carried out under the provisions of the Public Health Acts, 1875, which enacts that a ship when in the district of a Local Authority, shall be dealt with as a house within the district (Section 110). The requirements attended to included cleanliness, light and ventilation of living spaces; the provision of clean and suitable vessels for water supply; the provision of clean and suitable storerooms and lockers for provisions; repairs of dilapidations, removal of effluvia from chain lockers, peaks, holds, limbers, bilges water closets, and the cleansing and removal of refuse.

Amongst the structural defects found were the following :—

Insufficient lighting and ventilation of crews' quarters. The system of lighting is quite inadequate and is rendered more so by the placing of cots or bunks (upper and lower tier) against the ships sides, and thereby obstructing free access of the insufficient light provided to all parts of living spaces. Also by the use of dark colour paint instead of white, when painting the spaces out.

Insufficient table and seating accommodation in crews' quarters.

Insufficient storage for food, this applies especially to weekly boats, where each member of the crew provides his own provisions.

Hatchways in floors of living quarters, leading to peaks, stores or lockers, owing to which ships stores, gear, etc., have to be taken through the men's quarters.

Dampness caused by condensation of moisture on bare iron surfaces, from leakage through decks, side ports and hawse pipes.

Water closet accommodation adjoining quarters, with doors opening against or directly opposite to entrance of living spaces, or in enclosed alleyways, which are often but imperfectly ventilated.

During the year 1,796 vessels were inspected, of these 1,157 were British and 639 were Foreign, 395 vessels—277 British and 118 Foreign—were found to have sanitary defects on board: 576 revisits were made to see that notices had been complied with and to vessels having had sickness on board, and to those arriving from infected areas.

Number of Vessels inspected, Foreign and Coastwise :—

Foreign :—

	No. Inspected.	No. Defective	No. Notices.
Steamships ...	951	282	282
Sailing Vessels ...	2	1	1

Coastwise :—

Steamships ...	778	106	106
Sailing Vessels ...	65	6	6
	—	—	—
	1796	395	395
	—	—	—



## Number and Nationality of Vessels Inspected:—

Nationality.	No.	No. of Vessels with Sanitary Defects.
American	4	—
British	1157	277
Belgian	43	3
Danish	38	1
Dutch	8	—
Estonian	8	1
French	158	16
Finnish	1	—
German	27	1
Greek	54	27
Italian	35	11
Japanese	14	2
Jugo Slav	2	—
Latvian	2	1
Norwegian	79	8
Portuguese	6	—
Russian	2	—
Swedish	31	—
Spanish	127	47
	—	—
	1796	395
	—	—

The following were the nuisances and defects dealt with :—

- 201 Vessels with dirty forecastles and berths.
- 83 Vessels with defective lights and ventilators.
- 54 Vessels with defective stoves and heating apparatus.
- 4 Vessels with defective cable casings, or hawse pipes passing through living spaces.
- 2 Vessels with defective scupper pipes passing through W.C.'s adjoining living quarters.
- 17 Vessels with defective and leaky decks.
- 4 Vessels with defective wood linings over bunks.
- 9 Vessels with defective food lockers.
- 3 Vessels with defective lamps in living spaces.
- 3 Vessels with defective bulkheads between living spaces and Water Closets, lockers or stores.
- 2 Vessels with insufficient table and seating accommodation.
- 5 Vessels with fresh meat, provisions or stores in living spaces.
- 6 Vessels with defective or dirty fresh water receptacles, or impure water supply.
- 3 Vessels with dirty provision stores.
- 12 Vessels with stagnant water on or under floors in living spaces.
- 2 Vessels with water closets used as Boswain stores, oil or paint lockers.
- 3 Vessels with defective entrance doors to living spaces.
- 15 Vessels with defective water closet pans, outgo pipes, or water service.
- 69 Vessels with choked and foul water closets.
- 54 Vessels with accumulation of refuse on deck.
- 31 Vessels with verminous living spaces.
- 2030 dirty or verminous beds were destroyed.

#### QUAYSIDE NUISANCES.

Nuisances caused by discharge of water closet contents on quayside from vessels berthed alongside quay.

During the year 46 orders were issued to Officers in charge of vessels to abate nuisances of this nature, and use only those water closets on off side from quay.

## IMPORTATION OF DOGS ORDER, 1901.

The number of vessels from Foreign direct and via British Ports, having dogs on board were :—

No. of Vessels: 133.                      No. of Dogs: 189.

## FOREIGN ANIMALS ORDER, 1910.

Two vessels which arrived from Foreign or via Home Ports, having animals on board were visited :—

Animals on Board: Pigs, 2.

Orders were issued to the Officer in charge for the disinfection and cleansing of pens and fittings used by the animals on board.

## INSPECTION OF IMPORTED FOOD.

## Public Health (Unsound Food) Regulations.

The following Food Ex Steamships stored in warehouses were condemned as unfit for human consumption :—

58 bags = 58 cwts. potatoes.     .

710 tins Loganberries = 1065 lbs.

I am, Gentlemen,

Your obedient servant,

W. J. JENKINS,

*Port Sanitary Inspector.*



